IN THE CLAIMS:

The following is a complete listing of claims in this application.

Claims 1-11 (canceled).

12. (new) Metal fin for a tube heat exchanger which forms an indirect exchange surface for increasing heat transfer between the tubes mounted in the fin, in which a fluid circulates, and air circulating between the tubes and along a fin surface in a predetermined flow direction,

the fin comprising:

a plurality of mounting apertures for receiving the tubes, disposed co-linearly in a plurality of spaced apart rows and a plurality of spaced apart columns, the apertures in adjacent rows being staggered such that the apertures in adjacent rows do not overlap, and the apertures in adjacent columns being staggered such that the apertures in adjacent columns do not overlap, each said mounting aperture being surrounded by a collar, and

means for increasing heat exchange between the flowing air and the fin, the means for increasing heat exchange comprising a pair of diverting conformations for each of said apertures, said pair of diverting conformations comprising a first diverting conformation arranged upstream of an aperture in the flow direction to force flowing air to pass either side of said aperture, and a second diverting conformation arranged downstream of an aperture in the flow direction to force flowing air to pass either side of apertures in an adjacent row,

the first and second diverting conformations being arranged co-linearly with the aperture therebetween in a column, with first and second diverting conformations of adjacent apertures in a column substantially rejoining at a plane of extension of apertures in an adjacent column,

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the first and second diverting conformation for an aperture having mirror symmetry in the plane of extension,

each said diverting conformation projecting from the surface of the fin and being recessed with respect to an opposite surface of the fin, and

each said diverting conformation having an edge proximal to a respective aperture and an edge distal to the respective aperture, with each said diverting conformation increasing in width and inclination from the distal edge to the proximal edge in a direction perpendicular to the plane of extension, and forming thereby a substantially semi-elliptical contour.

13. (new) Metal fin as in claim 12, wherein the first and second diverting conformations are sized so that at air velocities of between 1 and 5 m/s, the fin, per streamline, has an air pressure loss of between 0.3 and 4 mm WC (water column) respectively and an airside thermal resistance of between 0.016 and 0.008 m^2 K/W respectively.

14. (new) Metal fin as in claim 12, wherein each diverting conformation has a curved profile in a transverse direction with respect to the flow direction.

15. (new) Metal fin as in claim 12, wherein each diverting conformation is extended from the proximal edge towards the aperture by a deflecting sidewall.

16. (new) Metal fin as in claim 15, wherein the deflecting sidewall has a measurement in the flow direction smaller than the a measurement in the flow direction from the proximal edge to the distal edge of the diverting conformation.

17. (new) Heat exchanger comprising a plurality of metal fins according to claim 12, and mounted on tubes in which a fluid circulates.

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